



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE  
GOVERNOR

EUGENE A. CONTI, JR.  
SECRETARY

May 4, 2010

**MEMORANDUM**

**TO:** Mr. Calvin W. Leggett, P.E.  
Manager, Program Development Branch

**FROM:** Ms. Lynnise M. Hawes, P.E.  
Feasibility Studies Engineer

**SUBJECT:** **R-2506** – Proposed widening of US 13 from US 13 Business to NC 42;  
Bertie County.

As requested, we have completed feasibility study R-2506 for the widening of US 13 from US 13 Business to NC 42 in Bertie County. This project proposes to construct a four-lane divided section of roadway for the limits mentioned above, a distance of approximately 16.2 miles.

Our evaluation of this project was based on a four-lane shoulder section, 102 feet from edge of pavement to edge of pavement with 12-foot travel lanes, a 46-foot depressed grass median, and 8-foot shoulders (4 feet of which is paved) on 200 feet of right of way. It is anticipated that one hundred seventy-four (174) residences and seventeen (17) businesses would need to be relocated due to this project.

The estimated total cost of this project is as follows:

Construction.....	\$61,000,000
Right of Way.....	\$35,800,000
<u>Utility Relocation.....</u>	<u>\$2,600,000</u>
Total Cost.....	\$99,400,000

The current year Average Daily Traffic (ADT) along US 13 ranges from 3,800 vehicles per day (vpd) to 9,400 vpd. For the design year 2035, the traffic volume along US 321 is estimated to range between 6,900 vpd to 17,000 vpd. Truck traffic is estimated to make up approximately 12 percent of the daily traffic.

The existing segment of US 13 operates at a level of service (LOS) D under current traffic volumes. If no improvements are made in the 2035 design year, it is projected that the segment along US 13 will operate at a LOS E. With the proposed improvements, US 13 is projected to operate at a LOS A.

Between 2004 and 2007, 114 total crashes were reported within the project limits. The crash rate for US 13 is 166.55 crashes per 100 million vehicle miles (crashes/100MVM) traveled. This rate is lower than

the statewide rate of 186.99 crashes/100MVM for two-lane undivided rural United States routes. There were 42 injury crashes, 70 property damage only crashes, and 2 fatal crashes. The most prevalent types of crashes were Animal (32%), Fixed Object (27%), and Rear End (12%).

A detailed investigation was not conducted for this feasibility study, however it is anticipated that there will be possible impacts to Bertie High School and Askewville Elementary School. No impacts to parks, recreation areas, or community facilities are anticipated with this project.

Maps at the Survey and Planning Branch of the North Carolina State Historic Preservation Office were used to determine if any historic properties on the National Register of Historic Places (NRHP) or state study lists exist within the proposed project corridor. No properties located within the project corridor were found to be potentially historic properties.

The proposed project corridor is located in the Roanoke and Chowan River Basins. US 13 crosses several water bodies in the project corridor. Cashie River and White Oak Swamp have a stream classification of C Sw. Wildcat Swamp and Quioccason Swamp have a stream classification of C NSw. These water bodies will likely need to be surveyed and have the appropriate coordination with the North Carolina Department of Environment and Natural Resources (NCDENR) and the U.S. Army Corps of Engineers (USACE) during any environmental document study.

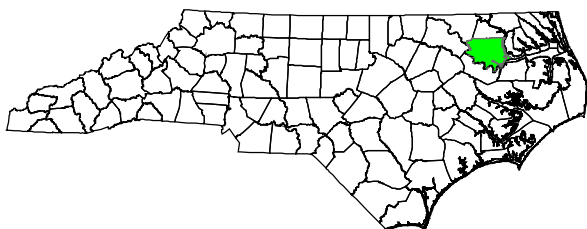
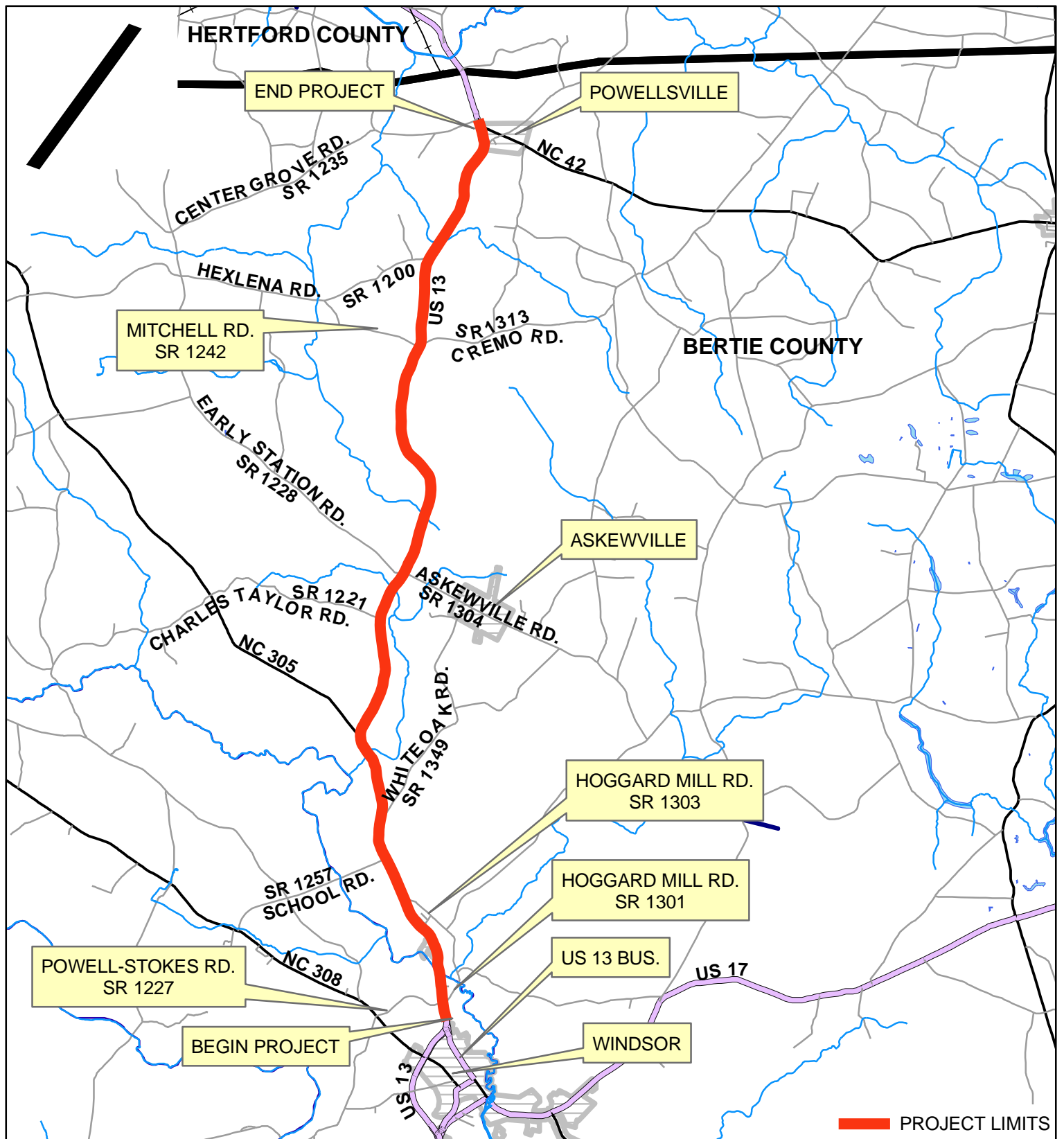
US 13 crosses wetlands associated with Cashie River, White Oak Swamp, Wildcat Swamp, Quioccason Swamp, and several jurisdictional wetland areas. Permitting with the U.S. Army Corps of Engineers (USACE) will likely need to be obtained before construction of the project, and appropriate mitigation measures should be taken if deemed necessary.

An anadromous fish spawn area was identified in the project study area.

As you are aware, this work is preliminary and not the product of comprehensive environmental or design evaluations. If you should have further questions or additional information is needed, please do not hesitate to contact me at 715-5775, or via e-mail at [lmhawes@ncdot.gov](mailto:lmhawes@ncdot.gov).

ATT: Project Map

cc: Al Avant, Assistant Branch Manager – Programming  
Ray McIntyre, P.E., Manager – TIP Eastern Region  
Jerry Jennings, P.E., Division 1 Engineer



NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
PROGRAM DEVELOPMENT

R-2506

US 13

FROM US 13 BUSINESS TO NC 42

BERTIE COUNTY

DIVISION 1

FIGURE 1